DEPRECIATION

- **A firm purchased a machinery for ₹ 2 lac salvage value is ₹ 20,000. It is to be depreciated by 20% at written down value method. What will be the depreciated value at the end of 3rd year?**

A.) ₹ 112200

B.) ₹ 102400

C.) ₹ 102100

D.) ₹ 101200

ACCELERATED DEPRECIATION

Accelerated depreciation is a depreciation method in which an asset loses book value at a faster (accelerated) rate than it would using traditional depreciation methods such as the straight-line method.

Therefore, under accelerated depreciation, an asset faces greater deductions in its value in the earlier years than in the later years. Accelerated depreciation is often used as a tax-reduction strategy.

SUM OF THE YEARS' DIGITS METHOD

The **sum of years' digits method** is a form of accelerated depreciation that assumes that the productivity of the asset decreases with the passage of time.

A **fraction is computed** by dividing the remaining useful life of the asset on a particular date by the sum of the year's digits. This fraction is applied to the depreciable cost of the asset to compute the depreciation expense for the period.

Sum of years' digits method attempts to charge a higher depreciation expense in early years of the useful life of the asset because the asset is most productive in early years of its life. Also, the asset loses much of its productive efficiency in early years.

$$\textbf{Depreciation expense} = \frac{\textbf{Remaining useful life of the asset}}{\textbf{Sum of the years' digits}} \times \textbf{Depreciable cost}$$

A machinery costing ₹100000 has a useful life of 6 years and salvage value of ₹10000. Calculate depreciation for all the years using sum of years digit method.

Double Declining Balance Depreciation Method

· Double-declining-balance depreciation results in a **larger amount expensed in the earlier years** as opposed to the later years of an asset's useful life.

· The method reflects the fact that assets are typically more productive in their early years than in their later years – also, the practical fact that any asset (think of buying a car) loses more of its value in the first few years of its use. With the double-declining-balance method, **the depreciation factor is 2x that of the straight-line expense method.**

Depreciation formula for the double-declining balance method:

Periodic Depreciation Expense = Beginning book value x Rate of depreciation

STEPS FOR CALCULATIONS

1. Calculate depreciation rate using straight line method
2. Double the depreciation rate
3. Calculate depreciation at doubled rate and

4. Calculate the depreciation at diminishing value i.e. net book value for each year.

Consider a piece of property, plant, and equipment (PP&E) that costs ₹2,50,000 with an estimated useful life of 8 years and a zero-salvage value. Calculate depreciation using double declining method.

Change in Method of Depreciation

· **At the end of each financial year, management should review** the method of depreciation. When there is a significant change in the pattern of the future economic benefits from the asset then the method of depreciation should also be changed.

· **As per the Accounting Standard 1** - Disclosure of Accounting Policies, the change in the method of depreciation is a change in the accounting estimate. Thus, it requires quantification and full disclosure in the footnotes. Also, the justification and financial effects of the change needs to be disclosed.

· The method of depreciation can be changed without retrospective effect or with retrospective effect.

Without retrospective effect means no adjustment will be made for past entries and only in the future depreciation shall be charged by the new method.

With retrospective effect implies that the amount of depreciation to be charged is adjusted from the date of purchase of the asset.

A company purchased a machine worth ₹5,00,000 dated 01.04.2018 and depreciation fixed at 10% p.a. on straight line method (SLM) basis. The company changed the method of depreciation to WDV method dated 01.04.2019 and sold the machinery for ₹2,00,000 dated 30.6.2020. what will be the amount of profit or loss?

REPLACEMENT OF A FIXED ASSET AND CREATION OF SINKING FUND

Depreciation is a non-cash expense (i.e. cash is usually paid out in the year the asset is acquired, but the expense is distributed over several years), **it is important to plan for the replacement of fixed assets** as they wear out or become obsolete.

Organizations may set aside an amount of cash equal to the amount of their yearly depreciation expense so that money will be available to purchase a new asset once the current one is fully depreciated.

Under this method 'Depreciation Fund' or 'Sinking Fund' is created and the amount is invested in readily saleable securities. At the end of the life of the asset, the securities are sold and the sale proceeds of the old assets are used for replacement of the asset.

ACCOUNTING ENTRIES

The accounting entries to be made on account of providing depreciation are:

Depreciation A/C	**Debit**
To Asset A/C	**Credit**

To Transfer Depreciation into P&L

Profit & Loss A/C	**Debit**
To Depreciation A/C	**Credit**

After the asset's useful life when all depreciation is charged throughout the years the asset approaches it **scrap or residual value**.

#Depreciation 1

On January 01, 2000 M/s ABC purchased a plant costing ₹ 41,000 and spent ₹ 4,000 on its erection. The estimated effective life of the plant is 10 years and scrap value of ₹ 5,000. Advise the depreciated value of the plant at the end of the 3rd year under SLM.

#Depreciation 2

X and Y purchased a second-hand machinery worth ₹8,000 on April 01, 1993 and spent ₹3,500 on over-hauling and installation. Depreciation is written off @ 10% on the original cost. On July 30, 1996 the machine was found to be unsuitable and was sold for ₹6,500. What is the loss to be written off?

#Depreciation 3

A company purchased machinery worth ₹ 20,000 on January 01, 2000 which is depreciated at 10% per annum on the original cost. On July 01, 2002 the machinery was sold for ₹ 12,000. What is the amount of the loss written off assuming that the books are closed on December 31st?